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Knowledge brokers: The role of intermediaries in producing research impact

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Introduction

Knowledge brokerage has been defined in the health policy context as 'all the activity that links decision makers with researchers, facilitating their interaction so that they are able to better understand each other's goals and professional cultures, influence each other's work, forge new partnerships, and promote the use of research-based evidence in decision-making' (Lomas, 2007: 131). Knowledge brokers 'effectively construct a bridge between the research and policy communities' (Nutley et al, 2007: 63). Beyond the policy context, non-academic research users may also include professionals and practitioners, charitable organisations, business and industry, and the general public. Knowledge brokers may be individuals, teams or organisations. The term 'knowledge intermediary' is sometimes synonymous with 'knowledge broker'. Alternatively, 'broker' may designate a particular type of intermediary role.

In this special issue of *Evidence and Policy* on knowledge brokers, we present Research, Debate and Practice papers exploring the broker or intermediary role across sectors – academia, the public sector, think tanks and charities. This is a field in which Canadian knowledge brokers and researchers have traditionally led the way, especially in health services research (e.g., CHSRF, 2003; CHSRF 2006; Dobbins et al, 2009; Lomas, 2007; Lyons et al, 2006; Robeson et al, 2008). However, in this special issue we focus especially on knowledge brokerage in the UK, where knowledge brokerage is emerging strongly as a theme in UK research policy and practice. This is partly in response to what has become known colloquially in the UK as the 'impact agenda', where the national system for assessing the quality of research in UK higher education institutions (known as the Research Excellence Framework) now includes measures to assess the impact of research beyond the academy (HEFCE, 2011). Within UK universities, many social science departments and research centres are employing dedicated knowledge exchange staff to ensure their research has impact (Knight and Lightowler, 2010). However, there is a lack of clear guidance and evidence for this emerging profession (Ward et al., 2009: 274). In particular, knowledge from other sectors (where brokerage roles have a longer history) is not always reaching university-based knowledge brokers.

This special issue collects research and practice presentations, debates and discussions from the *Bridging the gap between research, policy and practice* conference held on 7 December 2011 at the Royal Institute of British Architects (RIBA), London. This event was organised by Dr Christine Knight on behalf of the ESRC Genomics Policy and Research Forum, University of Edinburgh. The conference focused especially on knowledge brokerage in the social sciences, and was designed to encourage dialogue between knowledge exchange practitioners and organisations, and researchers who study knowledge exchange.

It was attended by a capacity audience of 200 delegates from higher education, the public, private and third sectors².

Moving beyond the 'supply push' model

Governments hoping to succeed in the knowledge economy increasingly view university research as a critical resource to be utilised. There is a growing understanding that this issue is no longer solely about income derived from the commercialisation of academic research: the full story about the generation of impacts cannot be told simply in tales of licensing intellectual property, for example. For industry to thrive and for policy-making to be effective, knowledge transfer must evolve into genuine exchange between knowledge producers and potential knowledge users.

Accountability and research for decision-making are not solely British pre-occupations (see, for example, international accounts in National Academies, 2008; Lomas, 2000; Landry et al., 2001) but there are strong external drivers in the UK, with government and their research funding agencies compelling a focus on research use and the generation of research impacts on policy and practice. Catalysed by the then Secretary for Education as part of New Labour's 'modernising government' initiative, David Blunkett (2000) exhorted government and the research community to work together to address the lack of evidence for good research utilisation. The demand to demonstrate that investments in research have an impact continues to grow (for example, Boaz et al., 2009).

But appreciation is also growing for the level of effort required to achieve this. Clearly impacts do not arise automatically even from excellent research; no convenient tap has been found which can simply be turned "on" rather than "off". Analogous to long-standing debates about the inadequacies of the 'linear model of innovation' (e.g. Tait and Williams, 1999), there is growing recognition that the processes involved are neither unidirectional nor simple, as is perhaps implied in the older phrase "knowledge (or technology) transfer". Rather, they are two-way (at least), complex, non-linear and require behaviour change (RELU, 2010). So, increasingly, "knowledge exchange" (KE) is seen as a focus of concern among those hoping to see non-academic impacts from research (ESRC, 2009) and other 'K*' terms such as 'knowledge mobilisation' are finding increasing currency (see, for example, Shaxson et al., 2012).

The Higher Education Funding Council for England (HEFCE) recognises (2009, pp.16-17) that "the processes through which research leads to economic and social impacts are complex and non-linear" and acknowledges the challenges presented by time lags, attribution and corroboration (ibid., p.14). Most reflections upon the generation of innovation

² The conference twitter hashtag #kbconf registered over 500 tweets as comments and ideas were exchanged. Further information including conference audio and presentations is available at <http://www.genomicsnetwork.ac.uk/forum/events/pastevents/conferences/title.24718.en.html>

arising from research have focused on the natural and physical sciences and engineering, which might be expected to fit into a relatively well-delineated web of relationships and pathways leading toward commercialisation (for example, Howells, 2006). Funding bodies that support research in these fields may find it somewhat more straightforward to point to tangible impacts in terms of intellectual property generated or indeed to the economic contributions of spinout companies. More elusive are cases in which transfer of knowledge from the social sciences (as well as the arts and humanities) may have had an impact on public policy or professional practice.

There are long-standing reasons for supporting research for which no immediate application is foreseen and a broad acceptance of the indirect benefits of "basic research" from training and from unplanned discoveries (for example, Pavitt, 1991). Concerns are raised that the contribution of research that does not have a user-focus may be discredited and undervalued (Locock and Boaz, 2004). These authors also warn that the debate may be dominated by a narrow conception of utility where "researchers are under pressure to come down from their supposed ivory tower and respond more effectively to the messy real world needs of their research users". However, others puncture this 'myth of the ivory tower' (Fearn, 2009), citing findings which show that, in the social sciences, 60 per cent of UK academics are already working with public sector partners and 45 per cent with the third sector (Abreu et al., 2009, pp.28-29). Nevertheless, a core challenge lies in the intangible nature of many non-academic impacts: a policy-maker might incorporate an additional dimension into her/his thinking as a result of social science findings, but never directly acknowledge that work.

Weiss (1979) and others since (for example, Landry et al., 2001) have noted that there are many alternative models for research utilisation and that the assessment of impact should not always focus on the 'supply push' archetype. As noted above, how the brokerage role might facilitate this process of knowledge mobilisation is less well understood within the context of UK research and innovation policy (Meagher and Lyall, 2007, 2009; Meagher et al., 2008; Nutley et al., 2007, pp.63-64). Geoff Mulgan, chief executive of Nesta and former head of the UK prime minister's strategy unit, has described how³:

"Forty years of evidence about evidence shows that supply push models simply don't work... Again and again, I'm struck by the importance of the intermediation role, the translator role, which I think we still undervalue in this field ... We over-privilege someone with very deep knowledge over someone who's very good at orchestrating networks to pull in multiple types of useful knowledge."

This special issue aims to redress this deficit by sharing knowledge and practice on this intermediation role focusing on the social sciences, where the emergence of knowledge

³ *Future directions for scientific advice in Whitehall* seminar held 8 January 2013 at Nesta, London

brokers (at least in UK universities) is a relatively recent phenomenon (Knight and Lightowler, 2010: 544).

The role of intermediaries – an introduction to the papers

The 'Research' papers in this collection explore individual knowledge broker roles and experiences in academia and the English health service; think tanks as research mediators; and the range of knowledge intermediary roles. The two 'Debate' papers review the existing literature on knowledge intermediaries in the social sciences and focus on evaluation of knowledge brokerage and what we might learn from this about the intermediary role. The 'Practice' contribution examines brokerage in the not-for-profit sector.

Lightowler and Knight's paper, *Sustaining knowledge exchange and research impact in the social sciences and humanities: Investing in knowledge broker roles in UK universities*, follows their previous auto-ethnographic paper in this journal reporting their own experiences as university-based knowledge brokers in the social sciences (Knight and Lightowler, 2010), a growing group of higher education staff. In their paper in this issue, they report empirical findings of a qualitative, interview-based research study with knowledge brokers within the College of Humanities and Social Science, University of Edinburgh. Their paper highlights issues of sustainability in how knowledge broker roles are resourced and structured within the study institution. The authors argue that this represents a mismatch between high-level government and research council commitment to knowledge exchange and research impact, and current university investment in these roles. Individual institutions now need to 'catch up with' broader national research policies in order to retain knowledge broker staff, skills and experience, and ultimately sustain the long-term knowledge exchange relationships that lead to strong and lasting research impacts.

In making their case, Lightowler and Knight highlight the challenges facing individual knowledge broker staff in their study, including short-term contracts, lack of career progression, and competing demands alongside their knowledge broker function. Similarly, **Chew, Armstrong and Martin's** paper *Institutionalising knowledge brokering as a sustainable knowledge translation solution in healthcare: How can it work in practice?* highlights issues of sustainability of knowledge intermediary roles due to "structural issues around professional boundaries, organisational norms and career pathways" – this time in the context of the UK's National Institute for Health Research's programme of Collaborations for Leadership in Applied Health Research and Care (CLAHRCs). Chew and co-authors draw on concepts of role conflict and role ambiguity to explain the personal challenges that arise – inevitably, they argue convincingly – from knowledge intermediary roles. Nonetheless, these authors also present positive messages: although the intermediaries in their study experienced "uncertainty and isolation" to begin with, over time, these conditions "come to be framed positively, and are latterly considered to provide autonomy and opportunity". Moreover, as Lightowler and Knight also indicate, peer support networks – whether formal or informal – are key to reducing the negative experience of isolation.

Policymakers and other potential research users have their own world views, concerns, and cultures and may be motivated by quite different incentives to the research community. In their paper on *Knowledge brokers, entrepreneurs and markets*, **Caswill and Lyall** argue that movements of knowledge between producers and users should not be analytically separated from the contexts in which these exchanges occur. Drawing on data from an EU-funded project on the future of social sciences and humanities, they provide rich evidence of a diversity of interactions between policy actors and the social sciences where policy actors sometimes perceive themselves to be internal knowledge intermediaries. Significantly, these authors situate intermediation in its historical setting and discuss a variety of knowledge intermediary roles, suggesting that the concept of 'knowledge broker' applies to specific contexts and is only one of a number of identifiable knowledge intermediary roles.

In the last two decades, the number of think tanks based in the UK has grown significantly. These organisations provide an important source of ideas for policy audiences who do not always have the resources to collate and review extensive research evidence. As such, **Smith, Kay and Torres** suggest in their paper *Think Tanks as Research Mediators? Case Studies from Public Health* that think tanks have been framed as useful mediators between research and policy, which academics seeking to influence policy might do well to emulate. On the other hand, concerns have been raised about the ideological lens through which some think tanks frame research evidence. This paper offers valuable empirical findings to explore how think tanks in the UK work to influence policy, how they frame research, and on whose behalf they operate. Smith et al. find that there are some important limits on the extent to which academics and policymakers ought to rely on think tanks to perform a brokerage role.

In *A review of the role of research mediators in social science knowledge exchange*, **Sebba** reviews existing evidence about the processes of social science research mediation undertaken by think tanks, their effectiveness and limitations. She shows that think tanks undertake problem definition; research synthesis; improving access to research outputs; and network building. Arguably, more investment is required in infrastructure within higher education institutions for "linkage and exchange" models of brokerage to promote effective research translation and use. Like Smith et al., Sebba highlights issues with the independence of think tanks, and the quality of the research evidence they promote, especially given their potentially significant influence on policymaking.

As highlighted by earlier papers, knowledge intermediaries can take very diverse forms but **Meagher and Lyall** suggest that learning from evaluation can advance recognition of their role, and enable reflection on how to enhance the interactive relationships connecting research, policymaking and practice. Their paper, *The invisible made visible: using impact evaluations to illuminate and inform the role of knowledge intermediaries*, offers a form of meta-evaluation or synthesis of learning from across diverse evaluations of innovative UK funding schemes where findings highlight the importance of interactive processes and the

critical role of knowledge intermediaries. Meagher and Lyall suggest that looking for indications of ongoing relationships between producers and users of knowledge ("Enduring Connectivity") can provide evidence for the role of knowledge intermediaries in creating "demand pull" for research outputs.

Finally, **Murdock, Wilding and Shariff's** paper in this issue presents three different case studies of *Knowledge exchange between academia and the third sector*. The first describes the formal engagement mechanism of Knowledge Transfer Partnerships employed by London South Bank University. The second, from the Third Sector Research Centre, describes "research informed dialogues with the third sector", supported by a Knowledge Exchange Team of two staff members. Thirdly, the National Council for Voluntary Organisations (NCVO) undertakes "long-term, informal engagement and networking". Based on these various case studies, the authors conclude by highlighting the importance of resources, commitment and "development of epistemic networks"; involvement of research users right from the start; and a co-production model of knowledge production. Importantly, the authors also highlight that appropriate practices of, and pathways to, knowledge exchange will always depend on timing and context.

Overarching themes

Issues of terminology cut across the papers and are dealt with explicitly by Chew and co-authors, and by Sebba. The appropriateness of the term 'knowledge broker' was also the subject of lively discussion in the opening plenary of the *Bridging the gap* conference from which this special issue derives. Our goal in this collection is not primarily to engage in, let alone settle, debates about terminology. We do, however, highlight here that the papers in this collection use different terms for 'knowledge broker', and moreover, use terms such as knowledge broker, and indeed knowledge exchange, to mean different things. For example, Chew and co-authors refer to 'intermediaries' in preference to knowledge brokers, while Caswill and Lyall treat knowledge brokers as a subset of intermediaries. Unlike some other authors, Sebba distinguishes knowledge exchange from knowledge translation, suggesting that knowledge exchange does not involve any attempt 'to simplify, interpret or translate findings in order to improve access or use'. Rather than trying to resolve terminological differences here, we simply advise readers of the collection to be alert to, and reflect on, differences in terminology that could otherwise prove confusing.

Beyond terminology, there are findings and themes that cut across the papers in this collection. Lightowler and Knight, and Chew and co-authors, report similar experiences in studies with knowledge brokers in different organisations, sectors and sub-state nations within the UK. Lightowler and Knight's interview study took place with knowledge brokers in the College of Humanities and Social Science, University of Edinburgh; Chew and co-authors undertook a mixed-methods study, including interviews, with knowledge brokers in an English CLAHRC. The findings from the case studies presented in these two papers both reinforce and validate one another. While Lightowler and Knight, and Chew and co-authors, focus on the impact of brokerage roles on the *individuals* undertaking them, Smith and co-

authors, and Sebba, examine intermediary *organisations* – specifically think tanks. To what extent can findings about individuals in higher education or the public sector, versus whole organisations playing broker roles, be extended from one to the other?

Caswill and Lyall, and Murdock and co-authors, both highlight the importance of context in determining appropriate knowledge brokerage models and mechanisms. We are also reminded of the benefits of sharing learning about the multi-faceted brokerage role across sectors (Meagher and Lyall); of the fact that social science competes for attention of policy audiences within an open market for knowledge sources (Caswill and Lyall); and – above all – that knowledge brokerage may not be a neutral process (Smith et al.). As Meyer and others have argued previously, and as Sebba indicates in this issue, knowledge brokers do not simply move knowledge from one setting to another, or even just facilitate the movement of knowledge: in the process they create *new* knowledge (Meyer, 2010).

Together, these papers represent some of the latest research and practice in social science knowledge brokerage; provoke further thought and discussion amongst all those with an interest in this area; offer evidence and guidance for knowledge brokers; and help to build much-needed connections and circulate knowledge between sectors. They show that human resources, institutional infrastructure and long-term, intensive interpersonal relationships are key to effective brokerage – yet these pose financial, structural and personal challenges. We hope this issue goes some way toward delineating these challenges and appropriate solutions to them.

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